

CLAIMS

1. Apparatus for detecting radiating and non-radiating electronic devices, comprising:

5 at least one non-radiating device sensor for actively transmitting a detection signal which detection signal is adapted to trigger a response from a normally non-radiating device;

 at least one radiating device sensor for passively receiving a signal generated by a radiating device; and

10 synchronisation means for consecutively activating operation of the non-radiating device sensor and the radiating device sensor during sequential time slots.

2. The apparatus of claim 1 in which the at least one non-radiating
15 device sensor includes a transmit / receive antenna for detection of metals and / or semiconductors.

3. The apparatus of claim 1 or claim 2 in which the at least one non-radiating device sensor includes a cable checking sensor.

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4. The apparatus of claim 1 in which the at least one radiating device sensor includes any one or more of:

 a receive antenna for detection of radiating devices;

 an infra red sensor; and

25 a cable checking sensor for detection of electrical and / or electromagnetic signals on a cable.

5. The apparatus of claim 1 further including a non-radiating device detector coupled to the at least one non-radiating device sensor.

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6. The apparatus of claim 1 further including at least one radiating device detector coupled to the at least one radiating device sensor.
7. The apparatus of claim 5 in which the at least one radiating device detector includes a harmonic receiver.
8. The apparatus of claim 5 in which the at least one radiating device detector comprises a broadband receiver.
9. The apparatus of claim 5 in which the at least one radiating device detector comprises any one or more of a digital voltmeter, an audio amplifier and an oscilloscope.
10. The apparatus of claim 1 further including digital signal processing means for processing signals output from any one or more of the at least one non-radiating device sensor and the at least one radiating device sensor.
11. The apparatus of claim 1 housed in a single portable casing.
12. The apparatus of claim 1 including said at least one radiating device sensor and at least two said non-radiating device sensors, the synchronisation means including means for allocating different time slots to each of the non-radiating device sensors and to the at least one radiating device sensor.
13. The apparatus of claim 1 in which the at least one radiating device sensor is provided in a first housing, and the at least one non-radiating device sensor is provided in a second housing, and in which the synchronisation means is distributed between the first and second housing,

1 further including communication means for communication between distributed portions of the synchronisation means.

14. Apparatus for detecting radiating electronic devices, comprising:

5 at least one radiating device sensor for passively receiving a signal generated by a radiating device;

communication means for communication with at least one remote non-radiating device sensor which sensor actively transmits a detection signal to trigger a response from a normally non-radiating device; and

10 synchronisation means for consecutively activating operation of the remote non-radiating device sensor and the local radiating device sensor during sequential time slots.

15. Apparatus for detecting non-radiating electronic devices, comprising:

15 at least one non-radiating device sensor for actively transmitting a detection signal to trigger a response from a normally non-radiating device;

communication means for communication with at least one remote radiating device sensor which sensor passively receives a signal generated by a radiating device; and

20 synchronisation means for consecutively activating operation of the local non-radiating device sensor and the remote radiating device sensor during sequential time slots.

16. A method of detecting radiating and non-radiating electronic devices, comprising the steps of:

25 activating at least one non-radiating device sensor that actively transmits a detection signal which detection signal is adapted to trigger a response from a normally non-radiating device;

30 activating at least one radiating device sensor for passively receiving a signal generated by a radiating device; and

automatically synchronising the activation of the non-radiating device sensor and the radiating device sensor for consecutive operation of the non-radiating device sensor and the radiating device sensor during sequential time slots.

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17. Apparatus for detecting radiating and non-radiating electronic devices, comprising any two or more of the following non-radiating device sensors and radiating device sensors and their associated detectors, selected from:

10 a non-linear junction detector / radio jammer; a metal detector, a harmonic receiver, a broadband detector, a spectrum analyser, a single and / or multiple frequency receiver, a frequency counter, a cable checker;

the non-radiating device sensors for actively transmitting a detection signal which detection signal is adapted to trigger a response from a
15 normally non-radiating device and the radiating device sensors for passively receiving a signal generated by a radiating device; and

synchronisation means for enabling consecutive activation and operation of any non-radiating device sensors / detectors and radiating device sensors / detectors during sequential time slots.

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18. Apparatus substantially as described herein with reference to the accompanying drawings.